

ABSTRACT

COMPARISON OF TWO DOSES OF CAUDAL CLONIDINE ON SEVOFLURANE EMERGENCE AGITATION AND POSTOPERATIVE ANALGESIA IN CHILDREN

Background and Aims:

Sevoflurane, associated with significant emergence agitation in the recovery phase. This study was intended to compare two doses of caudal clonidine added to ropivacaine 0.2% for prevention of sevoflurane induced emergence agitation (EA) and to prolongation of postoperative analgesia with minimal side effects. **Methods:** Sixty children aged 1–7 years (ASA I-II) received standardized general anaesthesia with inhaled sevoflurane and caudal epidural block with 0.2% ropivacaine 1 ml/kg for sub-umbilical surgeries. Groups: (I) clonidine 2 µg/kg added to caudal ropivacaine; (II) clonidine 1 µg/kg added to caudal ropivacaine; (III) plain ropivacaine. EA and postoperative analgesia were assessed using pain/discomfort scale score and face, legs, activity cry, consolability (FLACC) score respectively. **Results:** Four out of twenty (20%)

children in group I experienced EA as compared to only eight out of twenty (40%) children in group II at 15 min after emergence (Fisher exact $P = 0.021$). group III 12 out of 20 patients got emergence agitation at 15 min. Median time of maintaining adequate caudal analgesia without the need for paracetamol for group I was 16 (8–20) h and for group II is 12 (8–20) hours **Conclusion:** Caudal clonidine 2 $\mu\text{g/kg}$ added to 0.2% ropivacaine 1 ml/kg is suggested to be the optimal dose, for prevention of EA with prolongation of postoperative analgesia. **Key words:** Caudal clonidine, emergence agitation(EA), optimal dose, postoperative analgesia,